#### **Purchasing Office**

P.O. Box 2052 Thibodaux, LA 70310 985.448.4038 Fax: 448.4921



ADDENDUM NO 2
FOR
NICHOLLS STATE UNIVERSITY
THIBODAUX, LOUISIANA
April 16, 2010
PAGE 1 OF 1

Bid SB01522 due on April 28, 2010, at 3:00 PM for: <u>"Provide and Install Sound System in Student Union Ballroom"</u>

#### Purpose of Addendum: Change in specification..

Due to additional needs noticed after the initial bid was release, the University is changing the specifications to address those needs.

- 1) Remove and destroy original specifications and bid form pages 1 through 15
- 2) Replace with attached revised specifications and bid form pages 1 through 15

RECEIPT OF ADDENDUM SHOULD BE ACKNOWLEDGED ON THE BID FORM. FAILURE TO ACKNOWLEDGE ADDENDUM MAY BE CAUSE FOR BID NOT TO BE CONSIDERED.

Terry G. Dupre Director of Purchasing

## Nicholls State University Thibodaux, LA Student Union Sound System Page 1 of 15

I.	<b>Provide</b>	pricing to	furnish and	d install the	following	components:
	I I O I I GC	pricing to	I WI III JII WIII	u motam tme	TOHOWINE	components.

Item 1.	One (1) - Yamaha MG206 Rack mount mixer, or equal				
	1 EACH @ \$ Each = Total				
Item 2	One (1) - Yamaha MG166FX rack mount mixer, or equal				
	1 EACH @ \$ Each = Total				
Item 3.	Three (3) DBX 131 1/3 octave equalizers, or equal				
	3 EACH @ \$ Each = Total				
Item 4.	Two (2) DBX 266XL dual channel compressor limiters, or equal				
	2 EACH @ \$ Each = Total				
Item 5.	Two (2) Crown CDi-1000 dual channel 70 volt power amplifiers, or equal				
	2 EACH @ \$ Each = Total				
Item 6.	One (1) Raxxess KAR 35-22 floor standing equipment rack, or equal with KARD 35 Locking Front Door and KARD 35R vented rear door				
	1 EACH @ \$ Each = Total				
Item 7.	One (1) Odyssey CRP18W portable equipment rack with casters, or equal				
	1 EACH @ \$ Each = Total				
Item 8.	Two (2) Tascam CD200I CD Player with IPOD dock, or equal				
	2 EACH @ \$ Each = Total				
Item 9.	Two (2) Furman M-8DX rack mount power conditioner, or equal				
	2 EACH @ \$ Each = Total				

## Nicholls State University Thibodaux, LA Student Union Sound System Page 2 of 15

Item 10.	equal	ontrol 26C1 ceiling speaker assemblies, or			
	38 EACH @ \$	Each = Total			
Item 11.	Two (2) Audio Technica ATW-3141ac wireless handheld microphones, or equal				
	2 EACH @ \$	_ Each = Total			
Item 12.	Six (6) Audio Technica ATW-3131ac wireless lapel microphones, or equal				
	6 EACH @ \$	_ Each = Total			
Item 13.	Two (2) Audio Technica AEW-DA550c antenna/power distribution for wireless', or equal				
	2 EACH @ \$	_ Each = Total			
Item 14.	Five (5) MX418D/S flex	xible desk standing microphones, or equal			
	5 EACH @ \$	Each = Total			
Item 15.	Four (4) Atlas AT-100D speaker areas, or equal	wall mount volume controls for remote			
	4 EACH @ \$	Each = Total			
Item 16.	Two (2) Rapco Horizon equal	DP4-DFS 4-channel microphone plates, or			
	2 EACH @ \$	Each = Total			
Item 17.	Required 2-conductor 16 outer jacket	5 gauge twisted pair speaker cable with			
	1 FACH @ \$	Fach - Total			

## Specifications and Bid Form Nicholls State University Thibodaux, LA

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Item 18.	Required 2-conductor shielded 22 gauge twisted pair microphone cable					
	1 EACH @ \$	Each = Total				
Item 19.	Required labor and hardware for complete sound system installation and training.					
	1 EACH @ \$	Each = Total				
TOTAL NET LUMP SUM ITEMS 1 – 19 \$						
This bid shall be awarded on an all or none basis, based upon the lowest total net lump sum provided.						
THE BRAND NAMES SPECIFIED ARE USED ONLY TO DESCRIBE THE STANDARD OF QUALITY, PERFORMANCE, AND CHARACTERISTICS DESIRED AND IS NOT INTENDED TO LIMT OR RESTRICT COMPETITION. HOWEVER, IF BIDDING AN "EQUIVALENT" TO BRAND SPECIFIED IT IS MANDATORY THAT BIDDER FURNISH WITH BID DETAILED LITERATURE AND/OR SPECIFICATIONS TO BE USED IN EVALUATION OF PRODUCT. FAILURE TO SUBMIT SAID INFORMATION MAY BE CAUSE FOR BID NOT TO BE CONSIDERED.						
Acknowledgment of Addendums:						
Bidder should acknowledge receipt of addendum(s) issued. Failure to acknowledge addendum(s) may be cause for bid to be rejected.						
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# Specifications and Bid Form Nicholls State University Thibodaux, LA Student Union Sound System Page 4 of 15

#### II. SPECIFICATIONS:

#### A) Scope of Work

This sound system shall provide professional quality sound evenly distributed throughout the ballroom and outer areas as specified. This system shall be capable of connecting professional quality microphones, instruments, CD, MP3, or IPOD type players

This system shall consist of a main permanently mounted equipment rack with mixer, CD/MP3 player, equalizers, wireless microphones, amplifiers and compressors, and a portables rack with a mixer, and a CD/MP3 player to connect to remote microphone jacks when needed. The CD/MP3 players shall have an IPOD dock. There shall be two (2) 4-channel remote microphones jack plates, one on the north wall and one on the east wall.

This system shall have thirty (30) high quality ceiling speakers in the main ballroom area, four (4) speakers in the Captain's Room, two (2) speakers in the lobby area, and one (1) speaker in each of the two rest rooms. The Captain's Room, the lobby, and the rest rooms will have independent volume controls to adjust the volume in each area.

This system shall be installed by a professional sound contractor with experience in this type of system. This system shall be warranted for a period of three (3) years, unless stated otherwise by the manufacturer. After installation, the contractor shall make all necessary adjustments to the sound system to insure the highest quality possible and maximum performance. The contractor shall also provide training of sound system operation to personnel to be determined by the University.

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#### **B.** Product Specifications

Item #1 - Yamaha MG206 Rack Mount Mixer, or equal

- Total Harmonic distortion less than 0.1% (THD+N) 20 Hz 20 kHz @ +14 dBu (ST OUT)
- Frequency Response 0, +1, -3 dB 20 Hz 20 kHz @ +4 dBu (ST OUT)
- Hum & Noise 12 dBu Equivalent Input Noise/-98 dBu Residual Output Noise 20 Hz 20 kHz, Rs =  $150\Omega$ , input green = maximum
- Input Connectors Mic; 16 Line 12 Mono +4, CH insert: 12, Aux RTN: 2 Stereo, 2TR IN:1
- Input Connectors ST: 2, Aux Send: 4,
- Output Connectors CH Insert: 12, REC: 1 stereo, Monitor: 1 stereo Group: 4, Phone: 1
- Crosstalk -70 dB @ 1 kHz
- Phantom Power + 48V
- Input HPF CH 1-12, CH 13/14-19/20, 8cHz, 12 dB/oct
- CH EQ (MONO) +/-15dB (Max) High 10 k Hz: Shelving, Mid 2.5 k Hz Peaking, Low 100 Hz shelving
- Compressor (COMP) control x 1 (Gain/Threshold/Ratio) CH 1-6
- LED Level Meter, Pre MONITOR Level 2x 12 points LED meter (PEAK +10, +6, +3, 0, -3, -6, -10, -15, -20, -25, -30 dB) PEAK lights if the signal comes within 3 dB of the clipping level
- PEAK Indicator Red LED turns on when post EQ( ST CH: or post Mic HA) signal reaches -3dB below (17dBu)
- USB Audio USB IN/OUT Sampling Frequency = 44.1 kHz or 48 kHz (depend on the application of PC)
- Power supply adapter PA-30: AC 35VCT, Cable Length = 3.6r
- Power Consumption 40W

Item #2 – Yamaha MG166FX rack mount mixer, or equal

- Total Harmonic distortion less than 0.1% (THD+N) 20 Hz 20 kHz @ +14 dBu (ST OUT)
- Frequency Response 0, +1, -3 dB 20 Hz 20 kHz @ +4 dBu (ST OUT)
- Hum & Noise 12 dBu Equivalent Input Noise/-98 dBu Residual Output Noise 20 Hz 20 kHz, Rs =  $150\Omega$ , input green = maximum
- INPUT Connectors Mic: 10, Line 8 Mono +4ste, CH INSERT: 8, AUX RTN: 1 Stereo, 2 TR IN:1
- OUTPUT CONNECTORS ST: 2, Aux Send: 2, Effect send: 1, CH Insert: 8, REC: 1 Stereo, Monitor: 1 Stereo, Group 4, Phone 1
- Crosstalk -70 dB @ 1 kHz
- Phantom Power + 48V

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#### Item 2 Specification Continued

- Input HPF: CH 1-8, CH 9/10-11/12, 80 Hz, 12 dB/oct
- Input HPF CH 1-12, CH 13/14-19/20, 8cHz, 12 dB/oct
- CH EQ (MONO) +/-15dB (Max) High 10 k Hz: Shelving, Mid 2.5 k Hz Peaking, Low 100 Hz shelving
- CH EQ (Stereo) +/- 15 dB (Max.) Mid -, Low 100 Hz Shelving
- Compressor (COMP) control x 1 (Gain/Threshold/Ratio) CH 1-6
- Internal Digital Effect 16 Program, Parameter control foot switch (Digital effect, on.off)
- LED Level Meter Pre MONITOR Level: 2 x 12 points LED meter (PEAK +10, +6, +3, 0, -3, -6, -10, -15, -20, -25, -30 dB) PEAK lights if the signal comes within 3 dB of the clipping level.
- PEAK Indicator Red LED turns on when post EQ (ST CH: or post Mic HA) signal reaches -3dB below (17 dBu)
- Power supply adapter PA-30: AC 35VCT, 1. Cable Length = 3/6m
- Power consumption 35W

#### Item #3-DBX 131 1/3 Octave Equalizer, or equal

- Single 31-Band 1/3 Octave Constant Q frequency bands
- Switchable boost/cut ranges of +/- or +/- 12 dB
- 12 dB per octave, 3 dB down @ 50 Hz low-cut filter
- Front panel by pass switch
- +/-12 dB input gain range
- 4-segment LED ladders for monitoring output levels
- XLR and TRS Inputs and Outputs
- Internal Toroidal Transformer
- Frequency Response of <10 Hz to > 50 kHz
- Dynamic range of greater than 108 dB
- In put connectors ¼" TRS, female XLR (pin 2 hot)
- Input Type electronically balanced/unbalanced RF Filtered
- Input Impedance balanced  $40k\Omega$ , unbalanced  $20k\Omega$
- Input Max Input Level: >+21 dBu balanced or unbalanced
- Input CMRR >40dB typically > 55dB at 1kHz
- Output Connectors ¼" TRS, Male XLR (pin 2 Hot)
- Output type- Impedance-balance/unbalanced RF filtered
- Output impedance balanced  $100\Omega$ , unbalance  $50\Omega$
- Output Max Output Level .+21 dBu balanced/unbalanced into 2kΩor greater .+18 dBm balanced/unbalanced (into 600Ω)
- Bandwidth -20 Hz to 20 kHz, +0.5/-1dB
- Frequency Response <10Hz to >50kHz, +0.5/-3dB
- Dynamic Range 108 dB
- Signal to noise 90 db
- THD+Noise < 0.004%

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#### Item 3 specification continued

- Interchannel Crosstalk < 80dB, 20 Hz to 20 kHz
- Function switch EQ bypass by passes the graphic equalizer section in the signal path
- Function Switch Low Cut: Activates the 50 Hz 12 dB/octave highpass filter
- Function Switch Range selects either +/- 6dB or +/- 12 dB slider boost/cut range
- Operating Voltage 100 VAC 50/60Hz, 120 VAC 60 Hz, 230 VAC 50/60 Hz
- Power consumption 12W
- Mains Connection IEC receptacle

#### Item #4 – DBX 266XL dual channel compressor limiters or equal

- New gate timing algorithms for smooth release characteristics
- Program adaptive expander/gates
- Dynamics control for any type of program material
- Separate precision LED displays for gain reduction, compression threshold, and gat threshold to allow quick and accurate set up.
- Stereo or dual mono operation
- Balanced inputs and outputs on ¼" TRS and XLR
- Side chain insert
- Classic dbx auto mode
- Frequency Response Compressor/gate shall have two identical channels, each with an audio frequency response of 5Hz-40kHz, +0, -0.5dB, a balanced input impedance of not less that 40kΩ with a maximum input level of not less that +21 dBu and ¼" TRS input connector
- The output impedance shall be no more that  $50\Omega$  unbalanced,  $100\Omega$  balanced with a maximum output level of not less that +20 dBu, a minimum load impedance at not more than  $600\Omega$  and the connector type shall be  $\frac{1}{4}$ " TRS.
- Total Harmonic Distortion shall be less than 0.2%.
- The unit should have an output noise level of not more that -93dBu unweighted, and a dynamic range not less than 114dB.
- Outputs should be gain adjustable in the amount of +/-20dB from nominal gain via front panel output gain controls, and all outputs should be capable of driving a short circuit indefinitely with maximum input applied.
- The compressor attach and release times should be scalable and program dependent.
- The gat attack time shall be  $<100\mu$ sec.
- The compression threshold should range from -40 to +20dB.
- The gate threshold range should be from -60 to +10dBu.

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#### Item #4 Continued

- The compressor/gate should have a stereo coupling switch as well as the following controls for each channel: Compressor Threshold, Compressor Ratio, Attack, Release, Auto switch output, Gain, Expander/Gate threshold, Expander/Gate Ratio, Bypass.
- The following LEDs should exist for each channel: Compressor threshold (Below, At Above), Gain Reduction and Gate Threshold (Above and Below)
- The unit should operate from a power source of 100 VAC 50/60 Hz to 120 VAC 60 Hz for a domestic unit

Item #5– Crown CDi-1000 dual channel 70 volt power amplifier or equal

- Should be a solid state two channel model with a switch-mode universal power supply
- The outputs should be usable as dual or bridged-mono modes of operation.
- The bridged-mono mode should bridge the outputs to provide increased output voltage.
- The front panel controls and indicators should include the following: Level Detented rotary level control, one per channel, Power Switch on/off switch applies AC power to the amplifier, Sel/Prev/Next Buttons three buttons near the LCD screen should be used to access menu items and front panel lockout.
- LCD Screen backlit liquid crystal display shows speaker presets and signal processing,
- Signal indicator LED flashes when output signal level exceeds 10dB below clip
- -20 indicator LED flashes when output signal level exceeds -20 dB below clip
- Ready indicator LED, one per channel, turns on at the threshold of audible distortion,
- Temp indicator LED, one per channel, illuminates under excessive temperature conditions
- Power indicator LED illuminates when the amplifier has been turned on and has power
- Rear panel controls and connectors should include the following –
   AC line connector NEMA 5-15P (15A), input connector two 3 pin removable phoenix-type connectors each accept a balanced line
   level input signal, output connectors 4-position barrier strip with
   connectors for dual loudspeakers or bridge mono loudspeaker.
   dual connectors should work with 2-8 ohm 70v loads. Bridge mono connectors should work with 4-8 ohm or 140V loads,
   HiQnet USB connector type B, connects to a USB port on a PC.

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#### Item 5 Continued

- The amplifier should have the following specifications: Output Power with 0.5% THD: 2 ohm Dual (per channel): 700 W with 1% THD, 4 ohm Dual (per channel); 500W, 8 ohm Dual (per channel) 275W, 4 ohm Bridge-Mono: 1,400W with 1% THD, 70V Dual (per Channel): 500W, 140V Bridge-Mono: 1,000 W.
- Voltage Gain at 1kHz, 8 ohm rated output: 30.5 dB
- Frequency Response +0/-1dB from 20Hz to 20 kHz at 1 watt into 4 ohms
- Load Impedance: Safe with all types of loads. Rated for 2 to 8 ohms in Stereo Mode, 4 to 16 ohms in Bridge-Mono mode.
- Sensitivity 1.4V
- Signal to noise ratio (below rated 8-ohm power at 1kHz) 100 dB (A weighted)
- Damping factor better than 500 from 20 Hz to 400 Hz
- Crosstalk >70 dB below rated power 20 Hz to 1 kHz
- Input stage input is electronically balanced and employs precision 1% resistors
- Input impedance (nominal) 20 k ohms, balanced; 10 k ohms, unbalanced
- Maximum input signal +22 dBu typical

Item #6-Raxxess KAR 35-22 floor standing equipment rack, or equal, with KAR 35 Locking Front Door and KARD 35R vented rear door

- Welded 16 gauge cold rolled steel construction
- Fully adjustable front rack rail
- 16-gauge steel rack rail supports should be punched with ¼" holes for cable tie-off points
- Removable conduit knockout panels at both the top and bottom rear of the enclosure
- Additional knockouts should be located on each side of the rack for passing cable directly through and allowing racks to be ganged
- Unit should be provided with a cable strain-relief furrow in the bottom pan of the rack
- Sides, top, and bottom should have venting slots to ensure adequate cooling

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Item #7-Odsyssey CRP18W portable equipment rack with casters

- Carpeted rack case
- All plywood construction
- Heavy duty external hardware
- Pre-tapped rack rails
- Recessed large grip handles
- Flush mount lids with latches and stackable ball corners
- 18 spaces minimum
- 3" casters
- Minimum dimensions 21"@ X 40"H X 22" D

#### Item #8 – Tascam CD200I CD Player with IPOD dock, or equal

- Plays audio CDs, MP3, CDs and WAV file CDs
- Dock connector for Apple iPod charging and playback
- iPod video playback from S-video or composite output
- CD Text and ID3 tag support
- Continue, Random and Program play modes
- Repeat all and repeat single play modes
- Index search
- Shock/skip prevention memory buffer
- +/- 12% pitch control (analog outputs only)
- RCA unbalanced line outputs (CD and ipods)
- Coaxial and Optical S/PDIF digital out (CD only)
- ¼" stereo headphone output
- 2u rack mountable
- Wireless 55-key remote control

#### Item #9 – Furman M-8DX Rack Mount Power Conditioner, or equal

- AC noise filtering to reduce radio frequency and electromagnetic interference (RFI/EMI)
- Spike and surge protection to ensure equipment remains safe and power remains clean
- 8 rear panel power outlets and 1 front panel power outlet
- Digital voltmeter to display incoming line voltage
- 15 amp rating with circuit breaker
- Front panel LED indicator to inform that equipment is protected
- Two (2) retractable incandescent light fixtures with dimmer control for rack illumination, 120V, 4 watts each
- Operating voltage 120VAC 60 Hz
- Spike protection mode line to neutral
- Energy dissipation 170 joules

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#### Item #9 Continued

- Peak impulse current 12,000 amps
- Maximum continuous operating voltage 130 VAC RMS
- Let through voltage @ 125 amps 8/20uS wave form 400 volts
- Noise attenuation transverse mode greater than 26 dB 200 Khz to 10 Mhz

#### Item #10 – JBL – Control 26CT ceiling speaker assemblies

- Coaxially mounted 165mm (6.5") woofer with butyl rubber surround and 19mm (3/4") titanium coated diffraction-loaded tweeter
- High power wide frequency response and low distortion for high sound level capability
- Overload protection to allow higher operational levels
- Includes grille, back-can and tile rails
- Frequency Range -10 dB 75Hz-20kHz
- Power capacity 150 Watts continuous program power, 75 watts continuous pink noise
- Nominal sensitivity 89 dB SPL, 1W @ 1m (3.3ft)
- Nominal Coverage Angle 110 degrees conical coverage
- Directivity Factor 5.9 averaged 500 Hz to 4 kHz
- Directivity Index 4.6 averaged 500 Hz to 4 kHz
- Rated Maximum SPL 107 dB @ 1m (3.3 ft)
- Nominal impedance 16 ohms (Min Z 16.5Ω @ 290 Hz)
- Transformer Taps 70v: 60W, 30W, 15W and 7.5 W taps, 100V: 60w, 30w and 15W taps
- Transducers low frequency 165mm (6.5") polypropylene-coated 1" coil on aluminum former
- Transducer High Frequency 19mm (3/4") Titanium coated polyester
- Back-can formed steel, baffle/rim medium impact polystyrene, fire rated, UL94V-0
- Overload protection Full range power limiting to protect network and transducers on control 26C, not on control 26ct
- Termination removable locking connector with screw-down terminals, 2 input terminals and 2 loop-thru output terminals, max wire AWG 2.5 mm
- Safety Agency Rating suitable for use in air handling spaces per UL1480, UL2043, NFPA90 & NFPA 70, S7232/UL Listed, signaling speaker, Transformer UL, registered per UL1876. In accordance with IEC60849/EN60849
- Minimum dimensions 210 x 252 mm (8.3 x 9.9 in) 190mm (7.5") front of ceiling tile to back of backcan

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Item #11 – Audio Technica ATW-3141 ac wireless handheld microphones, or equal

- UHF Operating frequency Band C 541.500 to 566.375 MHz, Band D 655.500 to 680.375 MHz
- 200 channels per band
- Frequency Stability +/- 0.005% phase lock loop frequency control
- FM Modulat on Mode
- +/- 10kHz Normal Deviation
- 300' typical operating range
- 70 Hz to 15kHz frequency response
- Dual independent receivers, automatic switching diversity receiving system
- 60 dB nominal, 55 dB minimum image rejection
- Signal to noise ratio 110 dB at 35 kHz deviation (IEC weighted) maximum modulation 75 kHz
- Intermediate frequency 243.950 MHz 10.7 MHz
- Audio Output unbalanced 50mV (at 1 kHz +/-5 kHz deviation, 10k ohm load, Balanced 32 mV (at 1kHz +/-5 kHz deviation 10k ohm load
- Output connectors unbalanced ¼" TS ("mono") phone jack, Balanced XLRM-type
- Power supply 120V AC 60 Hz or 12-18V DC 500 mA, center positive with external supply
- RF Power output high 30 mW, low 10mW, nominal
- Spurious Emissions under federal regulations
- Dynamic Range ATW-T341 >/- 110 dB A- Weighted, ATW 371 >/- dB A-Weighted
- Microphone element ATW-T341 Dynamic cardioid unidirectional, ATW-T371 Condenser Cardioid Unidirectional
- Batteries Two 1.5V AA Alkaline
- Included with stand clamp ATB456a quieted flex

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#### Item #12 Audio Technica ATW 3131AC Wireless Lapel Microphones

- UHF Operating frequency Band C 541.500 to 566.375 MHz, Band D 655.500 to 680.375 MHz
- 200 channels per band
- Frequency Stability +/- 0.005% phase lock loop frequency control
- FM Modulat on Mode
- +/- 10kHz Nominal Deviation
- 300' typical operating range
- 70 Hz to 15kHz frequency response
- Dual independent receivers, automatic switching diversity receiving system
- 60 dB nominal, 55 dB minimum image rejection
- Signal to noise ratio 110 dB at 35 kHz deviation (IEC weighted) maximum modulation 75 kHz
- Intermediate frequency 243.950 MHz 10.7 MHz
- Audio Output unbalanced 50mV (at 1 kHz +/-5 kHz deviation, 10k ohm load, Balanced 32 mV (at 1kHz +/-5 kHz deviation 10k ohm kload
- Output connectors unbalanced ¼" TS ("mono") phone jack, Balanced XLRM-type
- Power supply 120V AC 60 Hz or 12-18V DC 500 mA, center positive with external supply
- RF Power Output high 30 mW, Low 10 mW nominal
- Spurious emissions under federal regulations
- Dynamic Range >/-p 110 dB A-Weighted
- Input connections high impedance, low impedance, bias
- Two 1.5V AA Alkaline Batteries
- Current Consumption High 200 mA, Low 150 mA, typical

## Item #13 – Audio Technica AEW-DA550c Antenna/power distribution for wireless', or equal

- Nominal frequency range 540-565 Mhz
- Nominal amplifier gain 0 dB, +/-3 dB
- Nominal Cascade Gain, 3dB, +/- 3dB
- Input Impedance 50 ohms
- Output impedance 50 ohms
- In-lint antenna power +12V DC on RF input jacks, 250 mA maximum per jack
- External receiver power 12V DC, center positive, 500 mA maximum per jack (4 total)
- Power input 100-240V AC, 50/60 Hz, auto-adjusting 500W maximum
- Included with IEC 320-type 120V power cordset IEC 320-type AC pass-through cable, 10 BNC to BNC 1.5' RF interconnect cables, front-mount antenna cables and connectors, 4 ATW-RDCN DC power interconnect cables

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#### Item #14 – Shure desk style mic MX418/DS

- 18 inch gooseneck desktop base with 10 foot cable, logic functions, programmable switch and LED indicator, snap-fit foam windscreen
- Wide dynamic range and frequency response for accurate sound reproduction across the audio spectrum
- Interchangeable cartridges
- Transformerless output for increased immunity to noise over long cable runs
- Shock mount provides over 20 dB isolation from surface vibration noise
- Locking flange mount for permanently securing microphone to lecterns or tables
- Programmable on/off switch and LED on/off indicator
- Logic input and output terminals for remote control or use with automatic microphone mixers
- Supplied threaded flange mount for permanently securing the microphone to a lectern or table

## Item #15 – Atlas AT-100D Wall mount volume Controls for remote speaker areas, or equal

- Detachable phoenix style connector
- D shaft knob
- UL Listed
- 100 Watt
- 3dB step Positive detent attenuation (10 steps + Off)
- Stainless steel single gang wall plate with dial scale and skirted back knob
- Mounts into most boxes
- Includes both white and ivory decora inserts, trim plates and skirted knobs

Item #16 – RAPCO Horizon DP4-DFS 4- Channel Microphone plates, or equal

• 2-gang stainless steel plate with 4-switchcraft D3F connectors

Item #17 – 2-conductor 16 gauge twisted pair speaker cable with outer jack

No specification required

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Item #18 – 2-conductor shielded 22 gauge twisted pair microphone cable

No Specification required

Item #19 – Necessary labor and hardware for complete sound system installation and training

No specification required

#### III. INSURANCE:

The successful bidder shall provide a certificate of Insurance as per the attached "Standardized Insurance Requirements for State of Louisiana Contracts." The certificate shall name Nicholls State University as an Additional Insured and grant a waiver of subrogation.

#### IV. PRICING AND DELIVERY:

All pricing must include all costs for shipping, delivery and installation to Nicholls State University.

#### V: BRAND SPECIFICATION:

THE BRAND NAMES SPECIFIED ARE USED ONLY TO DESCRIBE THE STANDARD OF QUALITY, PERFORMANCE, AND CHARACTERISTICS DESIRED AND IS NOT INTENDED TO LIMT OR RESTRICT COMPETITION. HOWEVER, IF BIDDING AN "EQUIVALENT" TO BRAND SPECIFIED IT IS MANDATORY THAT BIDDER FURNISH WITH BID DETAILED LITERATURE AND/OR SPECIFICATIONS TO BE USED IN EVALUATION OF PRODUCT. FAILURE TO SUBMIT SAID INFORMATION MAY BE CAUSE FOR BID NOT TO BE CONSIDERED.

- VI. CONTACT STAN SILVERII, PROJECTS MANAGER, TO SCHEDULE SITE VISIT (985) 387-0040
- VII. All work shall be coordinated with Francisco Chacon, Director of Union Services, (985) 448-4452.